3: Hinder G-5 (1933-1942) 1944 AF15 East China AF15

tional and moral influence could induce employers to remedy unsatisfactory situations.[5] It is to the credit of those who worked in the early days that, undismayed by the size and difficulty of the task, going daily into back alleyways where very bad conditions existed, they attacked the worst of these and frequently eliminated possibilities of almost certain death by the changes which they were able to secure. Taking industry by industry, as opportunity presented, efforts were made to remove the most obvious dangers associated with their operation.

Less than two months after the first official was appointed by the Council to deal with industrial conditions, there occurred the worst industrial tragedy in the history of the city. On February 21, 1933, an explosion followed by a fire in a rubber shoe factory caused the deaths of 81 persons, 76 women and five men. The cause of the explosion was not definitely established. In all probability it occurred in a vulcanizer in which rubber shoes were "cured." Gasoline fumes driven off by the heat probably reached a potentially explosive degree of concentration, and a spark was perhaps supplied by the dropping of a steel frame inside the steel shell of the vulcanizer. There is still the possibility that the explosion was caused through faulty electrical installation in the dipping room, where rubber shoes were covered with a varnishing mixture containing a high percentage of gasoline. Here also a suitable concentration of gasoline fumes in the air could have produced an explosive mixture. In any case an explosion and fire occurred. Working at benches in the room immediately above the vulcanizing room were some 250 women, also using gasoline as a solvent and thus in an atmosphere charged with fumes. The fire spread with such rapidity that they were unable to escape, and the wooden floor on which they worked collapsed shortly into the inferno below.

This tragedy drew attention to general conditions in the rubber shoe industry which had grown swiftly in the preceding years. In 1933 there were 26 rubber shoe factories, all of them using gasoline freely without even the most elementary precautions. Some were grossly overcrowded and unable to provide adequate exits for the hundreds of women working on the shoe-forming process. Though without the legal power to do so, Industrial Division officials

[5] See Chapter II.

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633 466 295 through sheer insistence succeeded in closing six factories where it was found impossible to effect improvement. The remaining twenty were radically reformed. Among transformations which had made the whole industry reasonably safe by 1937 were the isolation of processes where gasoline was used, so that if a fire were to occur in one place it might not spread; the installation of proper electrical fittings for fume atmospheres; the inspection by qualified engineers of boilers, vulcanizers and other pressure vessels; the provision of adequate exits; and the installation of exhaust ventilation. Many owners built and occupied new premises. It was unfortunate that the hostilities in 1937 destroyed some enterprises and damaged many others where higher standards had been established.

The story of this particular industry has been related in detail since it is typical of the work that had to be done under conditions where no previous regulation had existed. Wherever it was possible to do so, in a wide range of industrial processes, standards were raised. But, as will be shown later, many fires and explosions occurred during the course of the improvement programme.[6] It almost seemed as if, as the efforts at betterment were being made, tragedies occurred to supply concrete evidence of the dangers. They assisted in the development of a public opinion urging action to prevent them. They were an added spur, if one were needed, to the efforts of those responsible for securing action. It can be asserted that the occasions so sadly presented were not lost. They meant renewed efforts by those whose aim was the elimination of the hazards which caused the tragedies.

633 466 Less obvious to the public perhaps but as serious to the workers were the health hazards which efforts were also made to eliminate and which are referred to later in this chapter.[7] A difficulty confronting the authorities lay not only in obtaining an initial compliance on the part of employers. Action could be secured finally, after sufficient insistence, by exploiting something of a nuisance value in repeated visits to offending factories, or, otherwise, appealing to the better nature of employers. Securing the permanence of the better conditions induced required further insistence. Mechanical installations for the removal of metal dust from polish-

[6] See page 38.
[7] See page 39, ff.